

This paper has become much longer than was intended, and I must not add to it a long list of friends to whom I am indebted for assistance; but I cannot close without specially thanking Dr. Hugo Eisig, the acting director of Dr. Dohrn's Aquarium, whose knowledge of the locality and constant kindness enabled me in a short time to collect material for the present communication.

XXXII.—*On a new Genus of Pycnogon and a Variety of Pycnogonum littorale from Japan.* By HENRY H. SLATER, B.A., F.Z.S.

By the kindness of Dr. Günther I have recently been enabled to examine all the Pycnogonoidea in the British Museum; and he has also been good enough to permit me to describe two species from Japan, which form part of the collection.

The first is a remarkable one allied to *Zetes* (Kröyer), but possessing distinct generic characters. It was recognized by Mr. Miers, of the Zoological Department, as new, and was provisionally named by him *Parazetes*, which name I gladly adopt.

PARAZETES, Slater, gen. nov.

Corpus gracile. Rostrum pedunculatum, ad basim valde constrictum, ad apicem paulatim attenuatum. Appendices primæ biarticulatæ, non cheliformes; secundæ 9-articulatæ, pedibus ovigeris 10-articulatis. Segmentum primum corporis processum tenuem, quasi collum, usque ad rostrum antice provehens. Abdomen clavatum.

Body slender; rostrum pedunculated, broad in the centre, gently decreasing in diameter towards its distal extremity, which is minutely four-cleft; first pair of appendages (maxillipeds) 2-jointed, not chelate; second pair (palpi) 9-jointed; ovigerous legs 10-jointed; first (cephalic) segment sending forward a long slender neck-like process towards the rostrum, on the middle of which the oculiferous tubercle is seated; legs smooth and slender.

Parazetes auchenicus, Slater, n. sp.

Animal slender; rostrum resembling that of *Zetes* (Kröyer in Gaim. Voy. en Scand. Lap. &c. Crust. pl. 38. fig. 1 *a-g*), fusiform; it also hangs down in the same manner as that of *Zetes* (ib. fig. 1, *b*), but is distinctly four-cleft at its apex—a

peculiarity, as far as I know, hitherto unknown amongst Pycnogons.

The first segment is produced into a sort of long neck, upon which the three pairs of appendages and the oculiferous tubercle are placed.

The appendages of the first pair (maxillipeds) arise from the end of the "neck," close to the base of the rostrum; they are short (1.45 millim.); and their terminal joint is a roundish knob, as in the genus *Achelia*.

Those of the second pair (palpi to the first) are long and slender, 9-jointed, and nearly 6 millims. in length; they arise from two tubercles at opposite sides of the "neck," and near its distal end; their third and fifth joints are much the longest, the first, second, and sixth much the shortest, the fourth and three terminal joints being nearly equal, and each about half the length of the third; the last three joints have a fringe of stiff hairs on their outer side: these hairs are curious as being of two thicknesses, the terminal third of each hair being only about half as thick as the basal part; there are also on the fifth joint a few long bristles which are similarly formed. I have not noticed any thing of the kind in any other genus.

The ovigerous legs are 10-jointed, slender, and about the same length as the palpi; they arise near the bottom of the "neck;" the four joints preceding the terminal claw have a fringe of beautifully denticulated spines; these, with the bristles just mentioned of the palpi, are the only hairs or spines on the animal.

The abdomen is of moderate length and clavate, its least diameter being at its middle.

Colour in spirit is pale straw.

The one specimen, from which I have taken my description, was dredged by Capt. St. John off Cape Sima, Japan; depth not mentioned; bottom, sand and broken shells; date 1873. Presented to the British Museum by J. Gwyn Jeffreys, Esq., and numbered in the Catalogue 73. 28.

Measurements.

	millim.
Rostrum (including constricted portion) to where it joins the "neck"	3.5
Quasi-neck, to insertion of first pair of legs	3.5
Abdomen, length of	1.35
Total length	11
Breadth of body at second pair of legs	3
Length of leg of second pair	16
Total breadth (16+16+3)	35

This genus comes pretty near to *Zetes* as figured by Kröyer (*loc. cit.*); but if *Zetes* is there correctly represented, there are

certain very material differences. In *Zetes* the fusiform rostrum is connected with the cephalic segment by a joint, so that the rostrum may be said to be two-jointed; in *Parazetes* no joint intervenes; in the latter the rostrum is directly united to the long neck-like process of the first segment by its own constricted base. In *Zetes* the maxillipeds (first pair of appendages) are four-jointed and chelate, in *Parazetes* two-jointed and not chelate. The palpi in *Zetes* have ten joints, in *Parazetes* nine. In *Zetes* the abdomen is two-jointed and furnished at the articulation with four long serrated spines; in *Parazetes* it is one-jointed, clavate, and without appendages. In *Zetes* the spines of the ovigerous legs are slightly serrated, in *Parazetes* deeply "runcinate;" and *Parazetes* has the apex of the rostrum four-cheft; *Zetes* has not.

Pycnogonum littorale (Fabr.), var. *tenue*, Slater.

This is a very interesting Japanese variety of the common *Pycnogonum littorale*, which is equally common on the east and west sides of the North Atlantic from 40° northwards.

It is of a much slenderer build than the ordinary *P. littorale*, the rostrum longer in proportion and not nearly so broad, the body less flat and shield-like, the leg-bearing lateral processes with considerable spaces between them, there being little or none in *P. littorale*; the oculiferous tubercle more prominent, and the eyes larger; the row of tubercles down the median line of the dorsal surface much longer, not so sharply pointed, and somewhat scabrous, as is also the abdomen.

Legs longer and slenderer, the fourth joint equal to the first three in length (in *P. littorale* equal to the second and third), and with the prominences less marked; the rest of the leg as in *P. littorale*, except that the spines in var. *tenue* are somewhat longer.

I subjoin the measurements as compared with a British specimen of about the same size.

	<i>P. littorale.</i> millim.	Var. <i>tenue.</i> millim.
Length of rostrum	3	3·5
Length of body from base of rostrum....	7	6
Length of leg	9	9
Breadth of body without leg	4·15	3·5
Total breadth	22·15	21·5

Colour, in spirit, dirty yellow.

Dredged by Capt. St. John off South-west Japan (33° 15' N., 129° 18' E.), July 1876. Presented to the British Museum by J. Gwyn Jeffreys, Esq., and numbered in Catalogue 78. 11.